

REMARKS

Summary of the Office Action and this Amendment

In paragraph 4 of the office action mailed 9/19/06, the examiner states:

Claim 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims cite "A signal bearing medium tangibly embodying a program of machine-readable instructions". This is descriptive material, which is nonstatutory, as written. In order for the claims to be statutory, they must cite "computer readable-medium". (See MPEP 2106. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)). Thus, Applicant must modify the claim language from "A signal bearing medium" to "A Computer readable-medium" and "machine-readable" to "computer-readable".

In paragraph 6 of the office action the examiner states:

Claim 3 is rejected under 35 U.S.C. 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language of "making at least one method call to a CIM object" is vague and indefinite since it does not clearly indicate what functions of the CIM

object. Without knowing this, one of ordinary skills would not know how to make/use the invention.

In paragraph 8 of the office action the examiner states:

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Swank (US 6,697,924) "Swank".

In this Amendment, the applicant has amended claims 1-2, and 4-20, has canceled claim 3, and has added new claims 21-23. Support for the amendments and new claims can be found, for example, in the specification at page 11, line 23, to page 13, line 10. No new matter has been added. Claims 1-2, and 4-23 are now pending in the application.

Claim Rejections- 35 U.S.C. 101

As mentioned above, in paragraph 4 of the office action, the examiner states:

Claim 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims cite "A signal bearing medium tangibly embodying a program of machine-readable instructions". This is descriptive material, which is nonstatutory, as written. In order for the claims to be statutory, they must cite "computer readable-medium". (See MPEP 2106. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)). Thus, Applicant must modify the claim language from "A signal bearing medium" to "A Computer readable-medium" and "machine-readable" to "computer-readable".

The applicant has amended claims 1-17 in accordance with the examiner's suggestions. Thus, claims 1-17 have been amended to recite "a computer readable-medium" in place of "a signal bearing medium", and to recite "computer-readable" in place of "machine-readable". Consequently, the applicant submits that the claim rejections under 25 U.S.C. 101 should be withdrawn.

Claim Rejections - 35 U.S.C. 112

As mentioned above, in paragraph 6 of the office action the examiner states:

Claim 3 is rejected under 35 U.S.C. 112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The language of "making at least one method call to a CIM object" is vague and indefinite since it does not clearly indicate what functions of the CIM object. Without knowing this, one of ordinary skills would not know how to make/use the invention.

In this amendment, the applicant has canceled claim 3, thereby eliminating the basis for this claim rejection.

Claim Rejections - 35 U.S.C. 102

a. Legal Criteria for 35 U.S.C. 102

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). . . . "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

MPEP § 2131 (8th ed., rev. 5, Aug. 2006).

c. Discussion Regarding the 35 U.S.C. 102 rejections

As mentioned above, in paragraph 8 of the office action the examiner states:

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Swank (US 6,697,924) "Swank".

The independent claims currently pending are claims 1, 16, 17, 18, 19, and 20, as amended herein. The applicant submits that all of the independent claims as amended herein include limitations that are not described in Swank.

Claim 1:

The applicant submits that claim 1 as amended herein, includes at least the following limitations that are not described in Swank:

receiving at an ITS RM, a request from a requesting device, for additional storage, wherein the request includes a requested amount of storage space;

determining if connectivity information has been received at the ITS RM from the requesting device,

and if not:

using a CIM Client Application, to provide the number of a LUN that is mapped to the requesting device, and requesting the connectivity information from a CIM server, wherein the connectivity information is a path from the requesting device to the LUN that is mapped to the requesting device;

sending the request for the requested amount of storage space, and the connectivity information, in a request to a service;

inputting the requested amount of storage space and the connectivity information;

identifying storage that is accessible by the requesting device based on the connectivity information;
identifying all LUNs that are masked from all hosts, in the identified storage;
selecting at least one identified LUN

Claim 16:

The applicant submits that claim 16 as amended herein, includes at least the following limitations that are not described in Swank:

receiving at an ITSRM, a request from the requesting host for additional storage, wherein the request includes a requested amount of storage space;
determining if connectivity information has been received at the ITSRM from the requesting host,
and if not:
using a CIM Client Application, to provide the number of a LUN that is mapped to the requesting host, and requesting the connectivity information from a CIM server, wherein the connectivity information is a path from the requesting host to the LUN that is mapped to the requesting device;
sending the request for the requested amount of storage space, and the connectivity information, in a request to a service;
inputting the requested amount of storage space and the connectivity information;
identifying storage that is accessible by the requesting host based on the connectivity information;
identifying all LUNs that are masked from all hosts, in the identified storage;

selecting at least one identified LUN using a best fit algorithm

Claim 17:

The applicant submits that claim 17 as amended herein, includes at least the following limitations that are not described in Swank:

receiving at an ITSRM, a request from the requesting device, for a resource, wherein the request includes a requested quantity of the resource;

determining if connectivity information has been received at the ITSRM from the requesting device,

and if not:

using a CIM Client Application, to provide the number of a LUN that is mapped to the requesting device, and requesting the connectivity information from a CIM server, wherein the connectivity information is a path from the requesting device to the LUN that is mapped to the requesting device;

sending the request for the requested amount of storage space, and the connectivity information, in a request to a service;

inputting the requested quantity of the resource, and the connectivity information;

determining if the connectivity information is good;

identifying resources, that are accessible by the requesting device based on the connectivity information, and that are masked from all hosts;

selecting at least one identified resource, using a best fit algorithm

Claim 18:

The applicant submits that claim 18 as amended herein, includes at least the following limitations that are not described in Swank:

- receiving at an ITSRM, a request from the requesting device, for additional storage, wherein the request includes a requested amount of storage space;
- determining if connectivity information has been received at the ITSRM from the requesting device,
- and if not:
 - using a CIM Client Application, to provide the number of a LUN that is mapped to the requesting device, and requesting the connectivity information from a CIM server, wherein the connectivity information is a path from the requesting device to the LUN that is mapped to the requesting device;
 - sending the request for the requested amount of storage space, and the connectivity information, in a request to a service;
 - inputting the requested amount of storage space and the connectivity information;
 - identifying storage that is accessible by the requesting device based on the connectivity information;
 - identifying all LUNs that are masked from all hosts, in the identified storage;
 - selecting at least one identified LUN

Claim 19:

The applicant submits that claim 19 as amended herein, includes at least the following limitations that are not described in Swank:

means for receiving at an ITS RM, a request from a requesting device, for additional storage, wherein the request includes a requested amount of storage space;

means for determining if connectivity information has been received at the ITS RM from the requesting device, and if not:

using a CIM Client Application, to provide the number of a LUN that is mapped to the requesting device, and requesting the connectivity information from a CIM server, wherein the connectivity information is a path from the requesting device to the LUN that is mapped to the requesting device;

means for sending the request for the requested amount of storage space, and the connectivity information, in a request to a service;

means for inputting the requested amount of storage space and the connectivity information;

means for identifying storage that is accessible by the requesting device based on the connectivity information;

means for identifying all LUNs that are masked from all hosts, in the identified storage;

means for selecting at least one identified LUN

Claim 20:

The applicant submits that claim 20 as amended herein, includes at least the following limitations that are not described in Swank:

receiving at an ITS RM, a request from the requesting device, for additional storage, wherein the request includes a requested amount of storage space;

determining if connectivity information has been received
at the ITSRM from the
requesting device,
and if not:
using a CIM Client Application, to provide the number of a
LUN that is mapped to the requesting device, and requesting the
connectivity information from a CIM server, wherein the
connectivity information is a path from the requesting device to the
LUN that is mapped to the requesting device;
sending the request for the requested amount of storage
space, and the connectivity information, in a request to a service;
inputting the requested amount of storage space and the
connectivity information;
identifying storage that is accessible by the requesting
device based on the connectivity information;
identifying all LUNs that are masked from all hosts, in the
identified storage;
selecting at least one identified LUN

In view of the discussion above, the applicant submits that the independent claims as presented herein are not anticipated by Swank, because each and every element as set forth in the claims is not found, either expressly or inherently described in Swank. In summary, the applicant submits that Swank does not describe each and every element set forth in claims 1, 16, 17, 18, 19, and 20, and therefore, the rejections of those claims should be withdrawn.

New Claims 21-23

New claims 21-23 have been added in this amendment. The new claims are all dependent upon claim 1, and should be allowable for at least the reasons discussed above regarding claim 1. Additionally, the applicant submits that the limitations of the new claims are not described in Swank. For example, the applicant submits that claim 21, includes at least the following limitations that are not described in Swank: "retrieving, the path from the requesting device to the LUN that is mapped to the requesting device, prior to performing the operation of, receiving at an ITS RM, the request from the requesting device."

Amendments, and Dependent Claims in General

The applicant submits that all of the dependent claims are novel and nonobvious for at least the reasons discussed above with regard to the independent claims. Some of the claim amendments in this amendment were made to clarify the wording and to correct typographical errors.

Conclusion

The applicant submits that all of the claims as presented herein are directed to statutory subject matter, and that in the claims the applicant has particularly pointed out and distinctly claimed the invention. Further, the applicant submits that the claims as amended herein are novel in view of Swank, and more generally, are novel and nonobvious in view of the cited references. In conclusion, the applicant respectfully submits that the application is in condition for allowance, and applicant requests reconsideration and further examination, and allowance of the application. Any additional fees required in connection with this amendment that are not specifically provided for herewith are authorized to be charged to Deposit Account No. 09-0466 in the name of International Business Machines Corporation.

Respectfully submitted,

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